

## CLAIMS

1. (Original) A circuit for applying a load to first and second differential signals of a differential pair of signals, comprising:
  - a diode quad having first through fourth nodes;
  - a first current source coupled to the first node; and
  - a second current source coupled to the second node;wherein the third and fourth nodes are adapted respectively to receive the first and second differential signals of the differential pair of signals.
2. (Original) A circuit as recited in claim 1, wherein at least one of the first and second current sources is programmable.
3. (Original) A circuit as recited in claim 1, wherein the first and second current sources are independently programmable.
4. (Original) A circuit as recited in claim 1, wherein one programming value establishes the current of both the first current source and the second current source.
5. (Original) A circuit as recited in claim 1, wherein the diode quad comprises four Schottky diodes.
6. (Original) A circuit as recited in claim 1, wherein the diode quad comprises four elements, each element comprising one or more diodes connected in series.
7. (Original) A circuit as recited in claim 1, wherein the diode quad comprises at least four semiconductor devices each having diode characteristics.
8. (Original) A circuit as recited in claim 1, wherein the first and second current sources are coupled to respective power supplies referenced to a common DC voltage.

9. (Original) A circuit as recited in claim 8, wherein the DC voltage is ground.
10. (Original) A pin electronics circuit for use in an automatic test system, comprising:  
a differential load having first and second terminals that are connectable to nodes of a unit under test, the differential load including—  
a diode quad having a first node coupled to a first current source,  
a second node coupled to a second current source;  
a third node coupled to the first terminal of the differential load, and  
a fourth node coupled to the second terminal of the differential load.
11. (Original) A pin electronics circuit as recited in claim 10, wherein the diode quad comprises four Schottky diodes.
12. (Original) A pin electronics circuit as recited in claim 10, wherein the diode quad comprises four elements, each element comprising one or more diodes connected in series.
13. (Original) A pin electronics circuit as recited in claim 10, wherein the diode quad comprises at least four semiconductor devices each having diode characteristics.
14. (Original) A circuit as recited in claim 10, wherein the first and second current sources are coupled to respective power supplies referenced to a common DC voltage.
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. (Cancelled)